

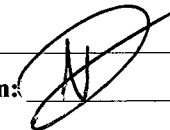
Work Order ID 125560

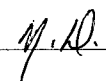
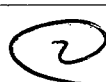
125560

Page 1

Tuesday, October 14, 2014 8:03:04 AM

Item ID: D119-675-012 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Heli-Access-Step™, RH
 Start Date: 10/14/14 Start Qty: 2.00 *2* Cust Item ID:
 Required Date: 10/17/14 Req'd Qty: 2.00 *2* Customer:
 Reference:

Approvals: Process Plan:  Date: 14-10-14 Tooling: Date: Run Start *NR1*
 QC: Date: SPC (Y/N): Date: Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
DSI9647	A								
100	Document Control	0.00							DAS 38 9-89
100	DOCUMENT CONTROL								
DC	Memo	0.00							
Doc.Control -USB or Paperwork	Photocopy bluefile & type labels per PPP D119-675-012			CHG005					14-11-12
110	Pick Kit	0.00							
110									
Packaging	Memo	0.00							
Packaging									
120	QC4- 100% Inspect kits for completeness	0.00							
120									
QC	Memo	0.00							
Quality Control									

B125573 X2RH

Work Order ID 125560

125560

Page 2

Tuesday, October 14, 2014 8:03:04 AM

Item ID: D119-675-012 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Heli-Access-Step™, RH
 Start Date: 10/14/14 Start Qty: 2.00 ***2*** Cust Item ID:
 Required Date: 10/17/14 Req'd Qty: 2.00 ***2*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Packaging	0.00							
130									
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP D119-675-012								
	Location: <u>084</u>								
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	0.00							
Quality Control									

2 NOV 24 2014 DAS 46 DAS 06
9-89 9-89

MLJ 15-01-30

[Handwritten signatures and dates]
 10-1-30
 14-11-25

Picklist Print

Page 1

Tuesday, October 14, 2014 8:03:23 AM

Work Order ID: 125560

125560

Parent Item: D119-675-012

D119-675-012

Parent Item Name: Heli-Access-Step™, RH

Start Date: 10/14/14

Required Date: 10/17/14

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev:D Removed Manufacturing JLM 05-11-01
 IPP Rev:E change to rev.b as per ECN1107 DD verified by: IPP REV:F
 13.09.03 chg005 / DSI9647 DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2274		Manufactured	No			110	Each	1,052.000	8	16			
D2274 Radius Block	DAS 38 9-89								**		DAS 28 9-89	NOV 06 2014	
				<u>Location</u>				<u>Loc Qty</u>	<u>Loc Code</u>				
				FG				12					
				86855				12					
				ST006				1040					
				109534				6					
				110264				2					
				112466				2					
				115803				34					
				<u>117869</u>				357		16x			
				121589				273					
				124363				366					
D2617-3		Manufactured	No			110	Each	53.0000	4	8			
D2617-3 Bushing	DAS 38 9-89								**		DAS 28 9-89		
				<u>Location</u>				<u>Loc Qty</u>	<u>Loc Code</u>				
				FG				10					
				27991				10					
				ST008A				43					
				<u>106147</u>				23		8x			
				107905				20					

Picklist Print

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Page 2

Work Order ID: 125560

125560

Parent Item: D119-675-012

D119-675-012

Parent Item Name: Heli-Access-Step™, RH

Start Date: 10/14/14

Required Date: 10/17/14

Start Qty: 2.00

Required Qty: 2.00

D2617-5 Manufactured No

110 Each

10.0000

4 8

**

DAS
28

9-89

NOV 06 2014

D2617-5

DAS
38
9-89

Spacer

Location

Loc Qty

Loc Code

FG

10

31756

10

125464

D2732-032 Manufactured No

110 Each

41.0000

8 16

**

DAS
28

9-89

D2732-032

DAS
38
9-89

Rubber Cushion - 32"

Location

Loc Qty

Loc Code

ST409

1

109546

1

ST410

40

117106

40

117118

D3041-1 Manufactured No

110 Each

15.0000

4 8

**

DAS
28

9-89

D3041-1

DAS
38
9-89

Clamp

Location

Loc Qty

Loc Code

ST528

15

86255

15

D3041-3 Manufactured No

110 Each

10.0000

2 4

**

DAS
28

9-89

D3041-3

DAS
38
9-89

Clamp

Location

Loc Qty

Loc Code

ST520

10

84001

10

851255X2

2x

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Page 2

Picklist Print

Page 3

Tuesday, October 14, 2014 8:03:23 AM

Work Order ID: 125560

125560

Parent Item: D119-675-012

D119-675-012

Parent Item Name: Heli-Access-Step™, RH

Start Date: 10/14/14

Required Date: 10/17/14

Start Qty: 2.00

Required Qty: 2.00

D3041-5 Manufactured No

110 Each

27.0000

4 8

D3041-5

DAS

38

Clamp

9-89

**

DAS

28

9-89

NOV 06 2014

DAS 9-89

Location

Loc Qty

Loc Code

ST528

27

106485

7

115538

20

8X

D3041-7 Manufactured No

110 Each

13.0000

2 4

D3041-7

DAS

38

Clamp

9-89

**

DAS

28

9-89

DAS

06

9-89

Location

Loc Qty

Loc Code

ST528

13

106487

9

115539

4

4X

D3043-042 Manufactured No

110 Each

0.0000

1 2

D3043-042

Step Weldment RH

DAS

46

9-89

**

DAS

28

9-89

DAS

06

9-89

125573

~~D 3338-1 127919 X5~~

DAS 9-89

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Tuesday, October 14, 2014 8:03:23 AM

Work Order ID: 125560

125560

Parent Item: D119-675-012

D119-675-012

Parent Item Name: Heli-Access-Step™, RH

Start Date: 10/14/14

Required Date: 10/17/14

Start Qty: 2.00

Required Qty: 2.00

AN4-15A

Purchased

No

110

Each

526.0000

4 8

AN4-15A

Bolt

DAS
38
9-89

**

DAS
28
9-89

NOV 06 2014

Location

Loc Qty

Loc Code

GA

100

120449

100

ST343

400

m129732

200

m130358

200

ST357

11

m127817

11

ST515

15

122141

4

m123525

6

m128978

5

AN4-16A

Purchased

No

110

Each

144.0000

8 16

AN4-16A

Bolt

38
9-89

**

DAS
28
9-89

DAS
06
9-89

Location

Loc Qty

Loc Code

FG

5

121541

5

ST343

116

M129590

66

M130466

50

ST357

23

M128324

19

M128978

4

Picklist Print

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Page 5

Work Order ID: 125560

125560

Parent Item: D119-675-012

D119-675-012

Parent Item Name: Heli-Access-Step™, RH

Start Date: 10/14/14

Required Date: 10/17/14

Start Qty: 2.00

Required Qty: 2.00

NAS1149D0463J

Purchased

No

110

Each

4,203.000

12 24

NAS1149D0463J

WASHER

DAS

38

9-89

**

DAS

28

9-89

NOV 0 6 2014

DAS

38

9-89

Location

Loc Qty

Loc Code

CA

472

M129682

472

ST277

3731

16941

8

M126221

20

M127813

6

M127904

16

M128591

44

M128995

1500

M129390

2137

24X

MS21042L4

Purchased

No

110

Each

3,569.000

12 24

MS21042L4

Locknut

DAS

38

9-89

**

DAS

28

9-89

DAS

38

9-89

Location

Loc Qty

Loc Code

ST007

12

121444

12

ST307

3557

111827

2

126275

5

m126015

12

m126275

27

m127255

63

m127376

9

m127813

821

m128300

69

m128798

658

m129472

391

m129934

1500

24X

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Page 5

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D119-675 REV. B AND
INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D119-675 REV. 2
REF. FAA STC SR00948SE & EASA STC EASA.IM.R.S.01458

1.0 INTRODUCTION:

The purpose of this Service Instruction is to improve installation of D119-675-011/-012 *Heli-Access-Steps*. This improvement consists of replacing the inboard D3042-1 Clamps and D2182B032 Rubber Cushions with D3041-5/-7 Clamps and D2732-032 Rubber Cushions.

For existing installations (D119-675-011/-012 *Heli-Access-Steps* @ Change 004 or earlier), this service instruction also recommends removal of the D2617-5 Bushings at the aft crosstube position to prevent the bearings in the D3041-1/-3 clamps from being pushed out and makes it permissible for operators to raise the step an additional 2.00 inches (51mm) to provide clearance for the ground handling wheels. Refer to section 2.0 of this Service Instruction.

New installations steps (D119-675-011/-012 *Heli-Access-Steps* @ change 005 or later) will have their parts list and instructions amended accordingly. Refer to section 3.0 of this Service Instruction.

2.0 INSTALLATION OF DSI 9647-011 CLAMP REPLACEMENT KIT:

- 2.1 The DSI 9647-011 Clamp Replacement Kit can be procured from Dart. One kit upgrades one step.
- 2.2 Remove and discard the D3042-1 Clamps, D2182B032 Rubber Cushions and hardware. Replace with the D3041-5/-7 Clamps, D2732-032 Rubber Cushions and hardware as shown in Section B-B and C-C of this Service Instruction.
- 2.3 Tighten clamp bolts. Do not exceed torque of 60 in-lb (6.8 nm) on the nuts.
CAUTION: Over-torquing the nuts could lead to structural damage of the clamps.
- 2.4 Amend weight and balance per section 4.0 of this Service Instruction.

A	NEW ISSUE	AJS	13.04.04
REV.	DESCRIPTION	BY	DATE
DESIGN	AJS	DART AEROSPACE USA, INC KENT, WA	
DRAWN	AJS		
CHECKED		DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9647	SHEET 1 OF 6
APPROVED		TITLE	SCALE
DE APPR.		CLAMP REPLACEMENT	NTS
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3.0 INSTALLATION INSTRUCTIONS:

For D119-675-011/-012 *Heli-Access-Steps* @ CHG 005 or later.

Step installations for the A119/AW119 MKII rotorcraft are illustrated in Figure 1 and View A-A, Sections B-B, and C-C of this Service Instruction.

3.1 Remove the existing crosstube-mounted short steps.

- a) For **A119 model** aircraft, remove the Agusta P/N 109-0570-33-101/-103 step by drilling out the 4 attachment rivets per step. Plug holes with rivets and touch up paint per the Aircraft Maintenance Manual as required.
- b) For **AW119 MKII model** aircraft, remove the Agusta P/N M031-01S002-041 step by removing the MS21920-20/-22 clamps. Touch up paint per the Aircraft Maintenance Manual as required.

NOTE: It is acceptable to leave the short steps on the landing gear provided they do not interfere with the installation of the Dart step in accordance with the dimensions shown in View A-A of Figure 1.

3.2 Install the D3041-1/-3 Clamps on the step as follows.

- a) For **A119 model** aircraft, install the D3041-1/-3 Clamps per Sections B-B and C-C of this Service Instruction.
- b) For **AW119 MKII model** aircraft, install the D3041-1 Clamps per Sections B-B and C-C of this Service Instruction.

3.3 Present the step to the outboard side of the crosstubes. Propping the step at the appropriate height (see Figure 1) can facilitate installation.

3.4 Install the D2732-032 Rubber Cushions under the D3041-1/-3/-5/-7 Clamps (see Sections B-B and C-C (of this DSI)).

3.5 Find the appropriate step height by locating the step/clamp as shown in View A-A. Locate the forward D3041-1/-3 Clamp 7.8"- 10.4" above the crosstube cuff. Locate the aft D3041-1 Clamp 7.8"-11.6" above the crosstube cuff. The distances given are from the crosstube cuff to the bottom-most clamp.

3.6 Tighten the clamp bolts. Do not exceed torque of 60 in-lb (6.8 Nm) on the nuts.

CAUTION: Over-torquing the nuts could lead to structural damage of the clamps.

3.7 Amend weight and balance per section 4.0 of this Service Instruction.

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MFG. APPR.	N/A	DSI 9647	SHEET 2 OF 6
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DE APPR.	<i>[Signature]</i>	CLAMP REPLACEMENT	NTS
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4.0 WEIGHT AND BALANCE:

Use the following Weight and Balance for D119-675-011/-012 @ CHG 005 or later.

Installation	Weight	LATERAL		LONGITUDINAL	
		Arm	Moment	Arm	Moment
D119-675-011	11.8 lb	-32.4 in	-382 in-lb	121.3 in	1431 in-lb
Heli-Access-Step™, LH	5.4 kg	-1.28 m	-6.9 m-kG	3.08 m	16.6 m-kG
D119-675-012	11.8 lb	+32.4 in	+382 in-lb	121.3 in	1431 in-lb
Heli-Access-Step™, RH	5.4 kg	+1.28 m	+6.9 m-kG	3.08 m	16.6 m-kG

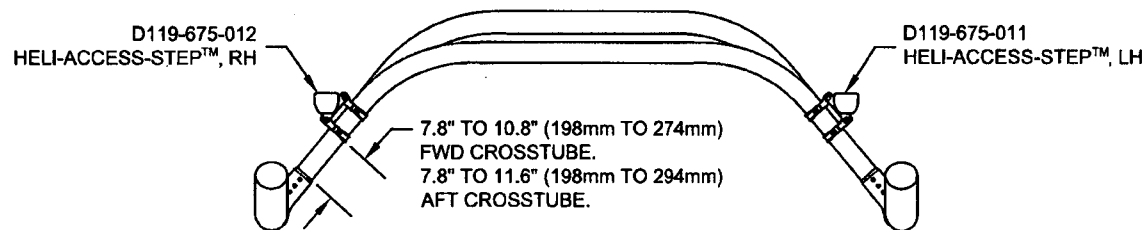
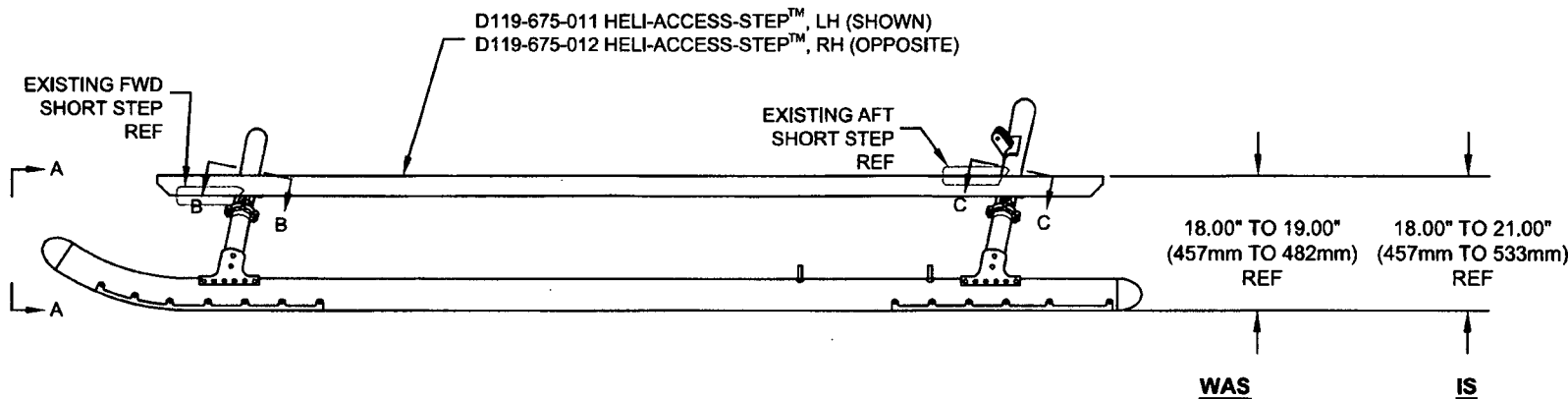
5.0 PARTS LISTS:

QTY -011	Part Number	Description
X	DSI 9647-011	CLAMP REPLACEMENT KIT
4	D2732-032	RUBBER CUSHION
4	D3041-5	CLAMP
2	D3041-7	CLAMP
8	AN4-16A	BOLT
8	AN960JD416	WASHER
8	MS21042L4	BOLT

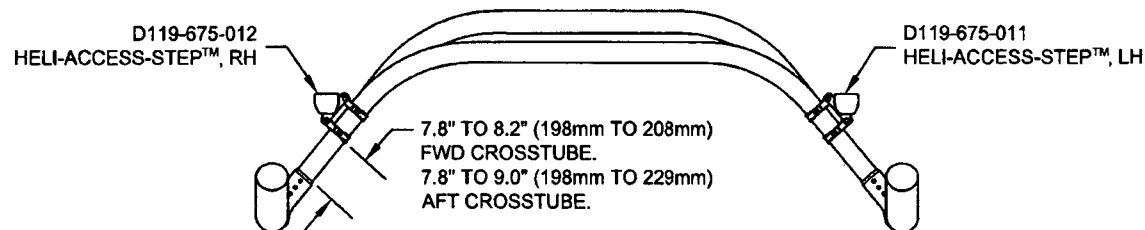
Use the following Parts List for D119-675-011/-012 @ CHG 005 or later.

Qty -011	Qty -012	Part Number	Description
X		D119-675-011	HELI-ACCESS-STEP™, LH
	X	D119-675-012	HELI-ACCESS-STEP™, RH
8	8	D2274	RADIUS BLOCK
4	4	D2617-3	BUSHING
4	4	D2617-5	BUSHING
8	8	D2732-032	RUBBER CUSHION
4	4	D3041-1	CLAMP
2	2	D3041-3	CLAMP
4	4	D3041-5	CLAMP
2	2	D3041-7	CLAMP
1		D3043-041	STEP WELDMENT LH
	1	D3043-042	STEP WELDMENT RH
4	4	AN4-15A	BOLT
8	8	AN4-16A	BOLT
12	12	AN960JD416	WASHER
12	12	MS21042L4	NUT (OR MS21042-4)

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MFG. APPR.	N/A	DSI 9647	SHEET 3 OF 6
APPROVED	<i>[Signature]</i>	TITLE	SCALE
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VIEW A-A

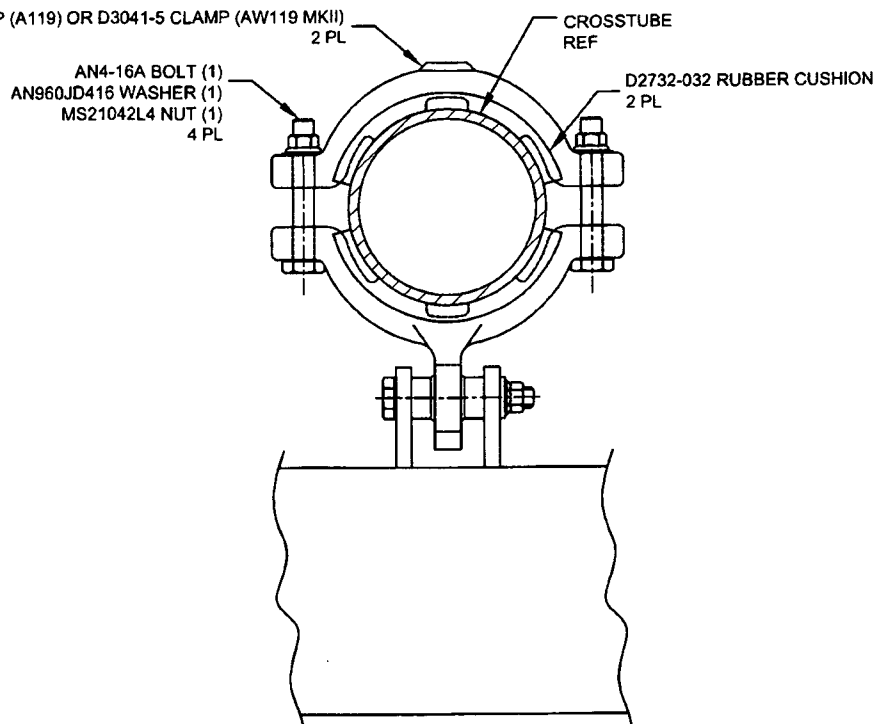


VIEW A-A

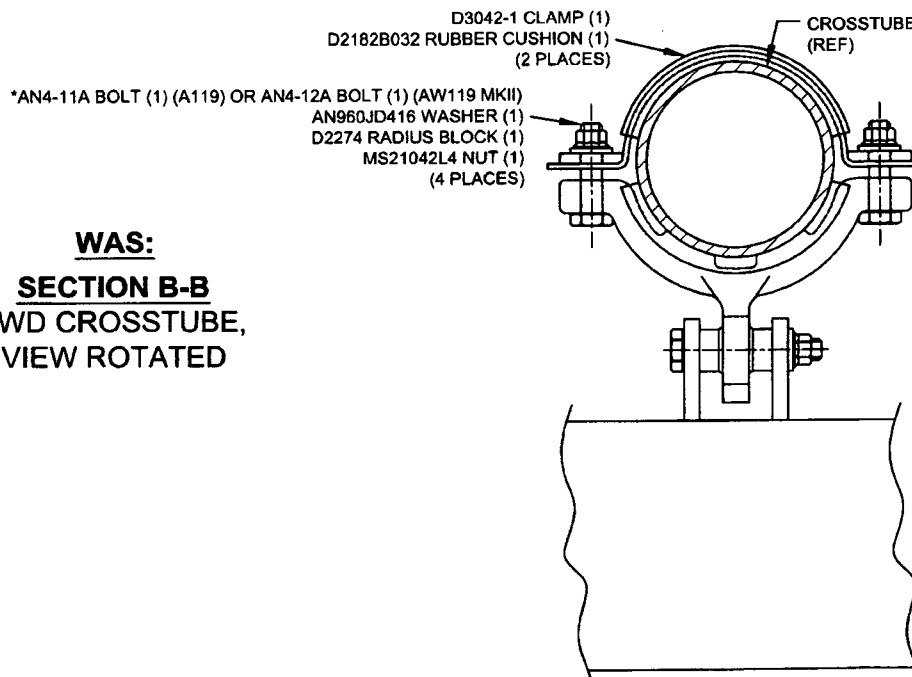
FIGURE 1 - D119-675-011/-012 HELI-ACCESS-STEP™

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IS:
SECTION B-B
FWD CROSSTUBE,
VIEW ROTATED

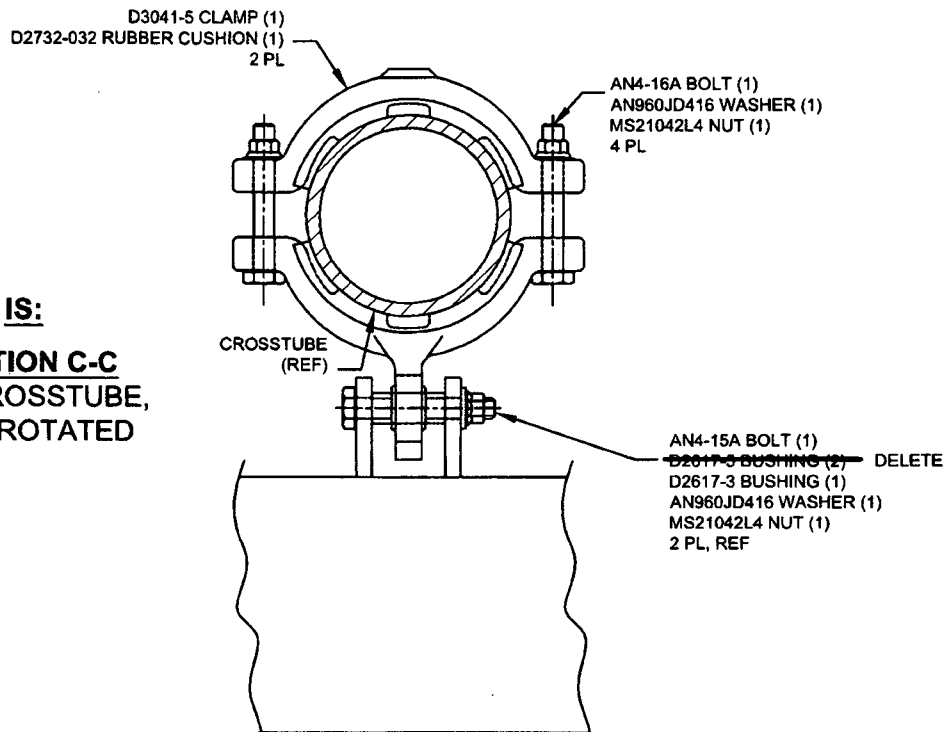


WAS:
SECTION B-B
FWD CROSSTUBE,
VIEW ROTATED

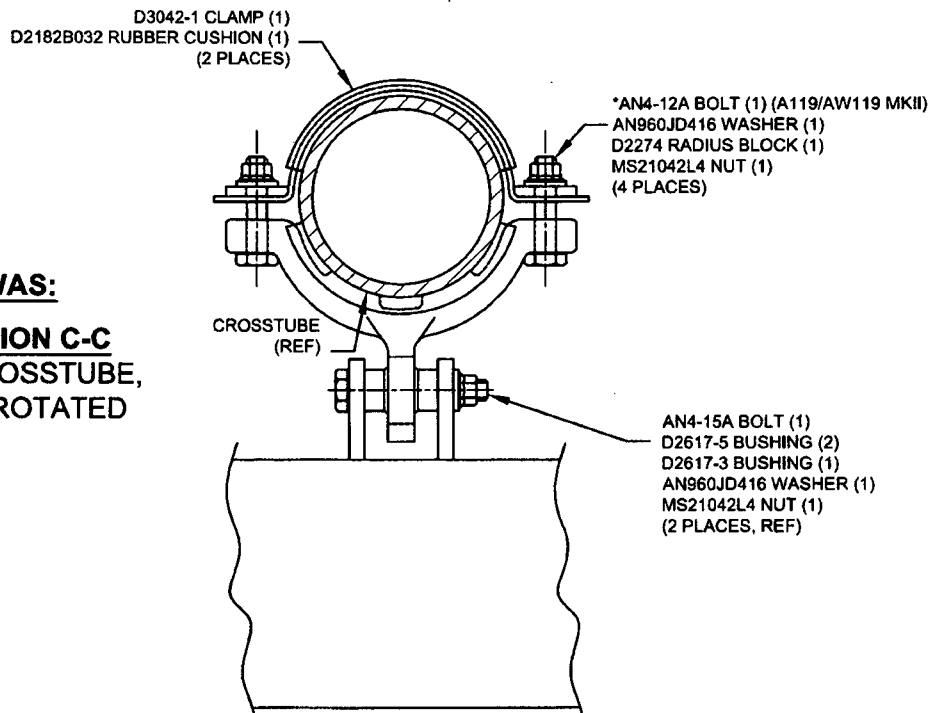


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MFG. APPR.	N/A	DSI 9647	SHEET 5 OF 6
APPROVED	<i>[Signature]</i>	TITLE	SCALE
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IS:
SECTION C-C
AFT CROSSTUBE,
VIEW ROTATED



WAS:
SECTION C-C
AFT CROSSTUBE,
VIEW ROTATED



DESIGN	AJS	DART AEROSPACE USA, INC KENT, WA	
DRAWN	AJS		
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MFG. APPR.	N/A	DSI 9647	SHEET 6 OF 6
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